

C 82998

(Pages : 2)

Name.....

Reg. No.....

SECOND SEMESTER B.Sc. DEGREE EXAMINATION, MAY 2015

(CUCBCSS-UG)

Core Course

Biotechnology

BT 2B 02—GENERAL MICROBIOLOGY

Time : Three Hours

Maximum : 80 Marks

Section A

*Answer any two out of 4 questions in about 1,500 words each.
Each question carries 10 marks.*

1. Describe the structure and function of bacterial cell wall.
2. Describe various physical methods of sterilization.
3. Explain different isolation methods of bacteria.
4. Discuss about different transport mechanisms in bacteria for uptake of nutrients.

(2 × 10 = 20 marks)

Section B

*Answer any seven out of 14 questions in about 750 words each.
Each question carries 5 marks.*

5. Give an account on immunisation.
6. Describe pentose phosphate pathway.
7. Explain different methods to measure microbial growth.
8. Describe the lytic and lysogenic cycle of bacteriophage.
9. Distinguish between a prokaryotic cell and a eukaryotic cell.
10. Describe the general characteristics of a virus.
11. Give an account on dermatomycoses.
12. Write a note on Koch's contributions.
13. Explain the phases in bacterial growth with the help of a growth curve.
14. Describe the structure of a bacteriophage.
15. What are the commonly used culture media used for the cultivation of bacteria and fungi ?
16. Discuss about AIDS and its control measures.

Turn over

17. Explain use of any *two* selective media with examples.
18. What is germ theory of disease ? How it prove ?

(7 × 5 = 35 marks)

Section C

Answer **all** questions in about 300 words each.
Each question carries 3 marks.

19. Explain ELISA.
20. Discuss about factors affecting bacterial growth.
21. Discuss phenol as disinfectant.
22. Explain principle of fluroscent microscope.
23. Describe pure culture methods to isolate microbes.

(5 × 3 = 15 marks)

Section D

Answer **all** questions in about 200 words each.
Each question carries 2 marks.

24. Endospores.
25. Chemotherapy.
26. Dimorphic fungi.
27. CFU.
28. Inspissation.

(5 × 2 = 10 marks)